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said controlling means (col. 6, lines 14-16); and said controlling means being adapted to provide a modulated driving signal to the display wherein at least one frequency component of the modulated driving signal is attenuated by the modulation such that emanated electromagnetic emissions are reduced (col. 6, lines 13-14 and col. 8, lines 52-54); . . .

Bassetti et al. **does not teach** means for controlling a display wherein the modulated row driving signal has a different period or frequency for one row than for another row. Ito et al, **teaches** a driver method, and drive circuit and a display device for liquid crystal cells (col. 10, lines 49-67; col. 11, lines 1-67; col. 12, lines 1-21 and Figs. 15A, 15B and 15C); Ito et al further **teaches** means for controlling a display wherein the modulated row driving signal has a different period or frequency for one row than for another row (col. 21, lines 32-67; col. 22, lines 1-10 and Figs. 15A, 15B and 15C).

Applicant respectfully traverses the rejections.

As discussed in response to the previous Office Action, each of the independent claims 1, 8, 12, 21 and 22 recite a feature in which the row driving signal is modulated so that a period or frequency associated with one row is different from another. Independent Claim 1 recites:

said controlling means being adapted to provide a modulated row driving signal to the display, wherein at least one frequency component of the modulated row driving signal is attenuated by the modulation such that emanated electromagnetic emissions are reduced, wherein the modulated row driving signal has a different period for one row than for another row.

Independent Claim 8 recites:

said controlling means being adapted to provide a modulated row driving signal to the display wherein at least one frequency component of the modulated row driving signal is attenuated by the modulation such that emanated electromagnetic emissions are reduced, said input data providing means being adapted to provide a modulated input data signal to said controlling means to accommodate the modulated row driving signal provided by said controlling means to the display, the modulated row driving signal having a first period for a first row, and a second period for a second row.

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Independent Claim 12 recites:

means for causing said controlling means to provide a modulated row driving signal to the display wherein at least one frequency component of the modulated row driving signal is attenuated by the modulation such that emanated electromagnetic emissions are reduced, the modulated row driving signal having a first effective frequency for a first row, and a second effective frequency for a second row.

Independent Claim 21 recites:

the modulated row driving signal having a first effective frequency when provided to the first row and a second effective frequency when provided to the second row.

Independent Claim 22 recites:

providing a first row signal for a row of pixels during a first row time period in accordance with first data stored in the buffer, and the control circuit providing a second row signal during a second row time period for another row of pixels in accordance with second data stored in the buffer.

Therefore, each of independent Claims 1, 8, 12, 21 and 22 recite features related to the provision of the row signals with different periods or frequencies.

Modulating row signals are described throughout the present application. For example, the present application states:

In accordance with one embodiment, the present invention, LCD controller 210 is internally modified to provide a variable row timing such that multiple frequencies are included in the row signal spectrum . . . an example of distribution row times is shown in Table 1.

See present application, page 5, lines 1-16. Table 1 of the present application shows exemplary row time periods of 20-2.17 microseconds and effective frequencies of 12.5 to 12.042 KHz.

In direct contrast to the row signals recited in independent Claims 1, 8, 12, 21 and 22, Bassetti does not disclose or suggest the variation of the frequency, periods or times for the row signal. Bassetti provides additional circuitry to ensure that the horizontal (period of the row signal) remains constant. See Bassetti, column 11, lines 35-55. The Examiner even admits that Bassetti does not teach means for the controlling a display wherein the

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modulated row driving signal has a different period or frequency for one row than for another. See Final Office Action, page 3. Therefore, Bassetti cannot provide a suggestion for varying the period, the time or the frequency of the row signal.

The Examiner relies on Ito for a teaching row signals with different periods or frequencies. However, Ito suffers from the same deficiency of Bassetti and teaches a row signal having the same period or frequency. Ito appears to use a row signal which is turned on and off in a pattern. However, the frequency and period of the entire row signal is maintained constant as it is turned on and off. Applicant notes that the example waveforms in Ito cited by the Examiner have the exact same period. See Ito, Figs. 15A-C. Applicant also notes that row signals X1-X3 in Figures 15A-C have a total period of $8\Delta\tau$. See Ito, column 22, lines 7-10. The method of Ito which maintains the entire row signal period and frequency constant is in direct contrast to the teaching of the present invention.

Further, Applicant notes that the frequencies described in the cited section of Ito by the Examiner refer to frequencies within the row signal and are not related to modifying the row period itself. Again, each row has a total period of four pulses on and four pulses off for a total period of $8\Delta\tau$. See Ito, column 21, lines 25-30 (Table E). Further, Applicant notes that there is nothing in Ito which refers to a change in spectral content of the timing. Ito merely ensures that rows are enabled in an overlapping but a distinguishable fashion. This technique probably would not achieve an advantage of reduced radiation levels. Accordingly, it is respectfully submitted that Claims 1-22 are patentable over the cited art because Ito does not provide a suggestion for varying row frequency and periods and in fact teaches away from such a technique.

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

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The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Respectfully submitted,

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By

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